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Subject: New RJR Cigarette "Reynolds"

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PED 10 MS.C. Darrah, G. Voelkl, U. Nyffeler, F. Lopes
J. E. NICKHAM

The limited number of packs of "Reynolds" cigarettes that were brought to Lausanne on January 28, 1987, by Mr. G. Voelkl, allowed to perform a limited number of tests. The results of these tests are subject to caution due to the insufficient quantity of material. At first sight, however, some observations are important:

# 1. Subjective Evaluation by Panel A (E. de Borst)

Apparently, a blend of bright and burley tobaccos. The claims by RJR could not be substantiated. There does not seem to be a "harmonious" flavor profile in this cigarette with increasing puff numbers, nor an initial strong flavor impact in the initial puffs. The overall taste quality was not considered better than average; there was a lack of body but a harsh impact in the throat.

## 2. Physical cigarette parameters (P.Y. Soguel)

Normal King Size cigarette with a 21 mm CA filter and a one-color cork tipping paper. Normal filler density. High RTD (138). When the tobacco filler is observed after having separated the paper, the impression prevails that the part closer to the filter end is darker and has shorter shreds.

### 3. Chemical Filler Blend Analysis (J.M. Renaud)

The nicotine content of the tobacco filler blend is higher (72%) at the front end than at the filter end (1.7%). There are also more reducing sugars at the front end than at the filter end, but the difference is probably not significant. No systematic decrease in nicotine and reducing sugars from the front to the filter end could be demonstrated when intermediate parts of the cigarette were analyzed. There was no systematic shift of nitrate and ammonium contents through the cigarette length.

Only the nicotine content allows to confirm the RJR claim of a double-blend in this cigarette. More discriminating results can be expected when a larger number of cigarettes will be available.

# 4. Puff-per-Puff Smoke Delivery (M. Murray).

To everybody's surprise the puff-per-puff profile of the "Reynolds" cigarette does not look different from the profiles of traditional one-blend cigarettes. According to the claims made by RJR on the benefits to be derived from their product one would expect to see, if not a flat profile, then at least a profile that shows a significant initial-puff enhancement. In the documents distributed at the press conference of January 27 in Trier, RJR is in fact very careful not to make a claim based on the tar profile; they refer to a "gleichmässiges Geschmackprofil".

## 5. RJR Patent Claims

In the relevant product patent RJR claims that the "segmented cigarette" as materialized in the new "Reynolds" product, is characterized by a first segment (the front-end segment) whose length is approximately 40 % of the total tobacco rod length, has a higher nicotine content in the first segment, and a 20-30 % higher density in the second (i.e. filter end) segment. The patent shows several puff-per-puff profiles of smoke nicotine; according to these, the nicotine delivery is enhanced in the initial puffs.

Stam una

### 6. Next steps

The R&D departments in Richmond and Neuchâtel will collaborate in a thorough investigation of the "Reynolds" cigarette as soon as enough cigarettes will be available to them.